

**REMARKS**

Claims 1-33 are now pending in this application. Claims 1-24 are rejected. New claims 25-33 are added. Claims 1-21 are amended herein to clarify the invention, to express the invention in alternative wording, to broaden language as deemed appropriate and to address matters of form unrelated to substantive patentability issues.

Applicant herein traverses and respectfully requests reconsideration of the rejection of the claims cited in the above-referenced Office Action.

Claims 1-24 are rejected under 35 U.S.C. § 112, first paragraph, for containing subject matter lacking an adequate written description in the specification. Applicant herein respectfully traverses this rejection. The Office Action states that the “one-dimensional regions” are not discussed in detail.

The description requirement of the first paragraph of 35 U.S.C. § 112 functions to ensure that the inventor had possession of the subject matter later claimed. How the specification satisfies this requirement is immaterial. It is not necessary that the application describe every claim exactly, but only so much that persons of ordinary skill in the art will recognize from the disclosure that the applicant invented the subject matter with the claimed limitations. *In re Wertheim*, 541 F.2d 257, 191 USPQ 90, 96 (CCPA 1976). In other words, the claimed subject matter need not be described in *haec verba* in the specification in order for the specification to satisfy the description requirement. *In re Wright*, 866 F.2d 422, 9

USPQ2d 1649 (Fed. Cir. 1989). Therefore, a determination of fulfillment of the description requirement under § 112, first paragraph, turns on whether those skilled in the art would understand what is claimed when the claim is read in light of the specification. *Orthokinetics Inc. v. Safety Travel Chairs Inc.*, 806 F.2d 1565, 1 USPQ2d 1081 (Fed. Cir. 1986).

In the present instance, it is clear to one of ordinary skill in the art that singular (or distinct) regions are provided in accordance with the invention, and which differ from other distinct regions in regard to “vibrationally relevant, especially resonance relevant, material and/or shape and dimensional parameters of their respective surroundings.” (See, for example, the second full paragraph on page 2). As further set forth in this portion of the disclosure, these distinct (singular) regions are then to be arranged in the form of at least one sequence of elements, which sequence (series) is advantageously mathematically or algorithmically determinable, such as a harmonic series (progressive, degressive, oscillatorial series, etc.), for example, following a variable interval (linear (one-dimensional) differentiation) between like elements (see, e.g., Fig. 2), a same spacing between elements wherein the series is reflected in a variable surface area (two-dimensional differentiation, see, e.g., Fig. 3) and/or wherein the series is reflected in volumetric variations (see, e.g., Fig. 6). Therefore, it is clear from the instant disclosure, that the singular regions can be made to be unique from one another, based, *inter alia*, upon a variance of a linear distance parameter (one-dimensional), surface area (two-

dimensional extent) and/or volume (three-dimensional). Thus, in this context, applicant respectfully submits that the written description requirement has been certainly met.

Moreover, it is noted that the specification paragraph referred to above on page 2 is amended herein to clarify the language relating to the “one-dimensional” regions, which revision retains the original meaning, however, using alternative terminology believed to be more appropriate, i.e., “linear,” which finds clear support in the originally filed German disclosure upon which the English translation is based. Thus, no new matter is added.

Therefore, in view of the above, reconsideration of the rejections of claims 1-24 are respectfully requested. Should such rejections be maintained, it is requested that the Examiner explain the grounds for the rejections, addressing the above remarks, to comply with satisfying the burden of the PTO in asserting the rejection. “The burden of showing that the claimed invention is *not* described in the application rests on the PTO in the first instance, and it is up to the PTO to give reasons why a description not in *ipsis verbis* is insufficient.” *In re Edwards, Rice, and Soulen*, 196 U.S.P.Q. 465, 469 (CCPA 1978) citing: *In re Salem*, 553 F.2d 676, 682, 193 USPQ 513, 518 (CCPA 1977); *In re Wertheim*, 541 F.2d at 265, 191 USPQ at 98.

Claims 1-24 are rejected as indefinite under 35 U.S.C. § 112, second paragraph, for failing to particularly point out and distinctly claim the subject matter of the invention as a result of informalities stated in the Office Action. The claims

are amended to remove or correct the informalities noted in the Office Action. Therefore, reconsideration of the rejection of claims 1-24 and their allowance are earnestly requested.

Claims 1-3, 6-21 and 23 are rejected under 35 U.S.C. § 102(b) as being anticipated by Wright et al. (US 6,431,996). Applicant herein respectfully traverses these rejections. "Anticipation requires the presence in a single prior art reference disclosure of each and every element of the claimed invention, *arranged as in the claim.*" *Lindemann Maschinenfabrik GmbH v. American Hoist & Derrick Co.*, 221 USPQ 481, 485 (Fed. Cir. 1984) (emphasis added). It is respectfully submitted that the cited reference is deficient with regard to the following.

Independent claim 1 recites in pertinent part the following:

a handling part;

an impact part which enters into dynamic operative connection with the object;

an actuating part coupling said impact part with said handling part; and

at least one arrangement including at least one of vibration- or resonance-active elements comprised of at least one of distinct volumetric, surface or linear regions, which differ from at least a part of respective

surroundings thereof by at least one parameter related to at least one of vibration or resonance and which form at least one sequence of said at least one of vibration or resonance-relevant elements extending over at least one of the parts of the impacting instrument, at least one of said at least one sequence corresponding to a harmonic series.

The claim, as amended, recites that at least one sequence of vibration- and/or resonance-relevant elements extending over at least one of the parts of the impacting instrument corresponds to a harmonic series, i.e., a sequence of quantities whose reciprocals form an arithmetic progression. It is respectfully submitted that no such teaching is provided by Wright et al. While the Examiner apparently equates the graphs shown in Figs. 2-4 of Wright et al. with a "harmonic series," that what is actually disclosed is merely the characteristic locations of flexural vibration mode frequencies along a shaft of a golf club, and not an arrangement of distinct regions, which differ from at least a part of respective surroundings by at least one parameter related to at least one of vibration or resonance and which form at least one sequence of said at least one of vibration or resonance-relevant elements extending over part(s) of the impacting instrument which are arranged in accordance with a mathematical

sequence of quantities whose reciprocals form an arithmetic progression, as is the ordinary accepted meaning of the claimed term “harmonic series.”

In view of the above, it is respectfully submitted that claims 1-3, 6-21 and 23 particularly describe and distinctly claim elements not disclosed in the cited reference. Therefore, reconsideration of the rejections of claims 1-3, 6-21 and 23 and their allowance are respectfully requested.

Claims 2, 4, 5, 22 and 24 are rejected as obvious over Wright et al. in view of Leon (US 5,707,302) and further in view of Yamaguchi (US 4,928,965) under 35 U.S.C. §103(a). The applicant herein respectfully traverses this rejection. For a rejection under 35 U.S.C. §103(a) to be sustained, the differences between the features of the combined references and the present invention must be obvious to one skilled in the art.

It is respectfully submitted that the proffered combination of references cannot render the rejected claims obvious because the secondary and tertiary Leon and Yamaguchi references similarly do not provide the teaching noted above with respect to the anticipation rejection that is absent from the primary Wright et al. reference. In particular, both references fail to teach or suggest elements extending over one or more parts of the impacting instrument and which are arranged in harmonic succession (for example: 1,  $\frac{1}{2}$ ,  $\frac{1}{3}$ ,  $\frac{1}{4}$ , . . .). Thus, the combination of prior art references fails to teach or suggest all the claim limitations. Therefore,

reconsideration of the rejections of claims 2, 4, 5, 22 and 24 and their allowance are respectfully requested.

Claims 25-33 are added and are submitted as patentable over the cited art of record. Independent claim 31 recites subject matter directed to at least one sequence of at least one of vibration- or resonance-relevant elements extending over at least one of various parts of an impacting instrument, at least one of the at least one sequence corresponding to at least one of a geometric or harmonic series which, among other features recited therein, is not believed disclosed in the cited art in the manner as claimed. Dependent claims 25-30 and 32-33 are patentable based on the subject matter recited therein in addition to the subject matter of the claims from which they depend.

For the convenience of the Examiner, an Appendix is provided herewith having rewritten versions of the amended claims with all amendments effected therein.

Nine (9) further claims in excess of twenty are added. Accordingly, please charge the fee of \$450.00 to Deposit Account No. 10-1250.

Applicant respectfully requests a three (3) month extension of time for responding to the Office Action. Please charge the fee of \$1,020.00 for the extension of time to Deposit Account No. 10-1250.

The USPTO is hereby authorized to charge any fee(s) or fee(s) deficiency or credit any excess payment to Deposit Account No. 10-1250.

In light of the foregoing, the application is now believed to be in proper form  
for allowance of all claims and notice to that effect is earnestly solicited.

Respectfully submitted,  
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